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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/293,702	04/16/1999	RALF SCHAEFER	450117-4866	5219

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FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER	
MIRZA, ADNAN M	

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/293,702	SCHAEFER ET AL.	
	Examiner	Art Unit	
	Adnan M. Mirza	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 14-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 14-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-6,14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mouly (U.S. 5,878,033) in view of Moline (U.S. 6,067,566).

As per claims 1 and 14, Mouly teaches method for determining access times of repeatedly broadcast objects in a broadcast channel using a unidirectional communication scheme in order to transmit the plurality of broadcast objects from a server side to receiver side (col. 4, lines 4-32), each of the plurality of said segments of said plurality of broadcast objects are permitted to have a different size, (ii) be segmented into smaller units in order to allow overlapped transmission or parallel transmission (col. 8, lines 27-37), (iii) transmitted in a different repetitive pattern (col. 4, lines 37-47), and also are permitted to be transmitted in a broadcast cycle in different orders (col. 4, lines 60-67 & col.5, lines 1-5), and a next reception point in time of said next segment of said broadcast object is calculated from a current time value and said repetition distance (col. 12, lines 44-64).

However, Mouly does not explicitly teach said method characterized in that each segment of a broadcast object of a broadcast cycle includes a header defining a repetition distance which is the distance between a completed transmission of the current segment of the broadcast object and the next transmission of a next segment of the broadcast object.

In the same field of endeavor Moline (U.S. 6,067,566) teaches the tracks include a track with a repetitive pattern which has a repetition time and may include tracks 1005(1... n) from other participations 905. Tracks 1005(1... n) are synchronized with repetition pattern. (col. 17, lines 15-18). With time stamps that are synchronized with the periods of the time stamps of track 607(i). Track 105(i) contains repetition sequences each of which fits repetitive pattern (col. 17, lines 27-31). Each event contains a MIDI event message and a time stamp which indicates the length of time between the beginning of the MIDI stream being recorded in the track and the occurrence of the event message contained in the event (col. 9, lines 39-43).

It would have been obvious to one having ordinary skill in the networking art at the time of the invention the reason to combine teaching of Mouly with Moline because Mouly even though have the similar art as the applicant but he does not go in details said method characterized in that a broadcast object of a broadcast cycle includes a header defining a repetition distance which is the distance between the completed transmission of the broadcast object and its next repetition. Thus introducing method characterized in that a broadcast object of a broadcast cycle includes a header defining a repetition distance which is the distance between the completed transmission of the broadcast object and its next repetition as taught by Moline in the method of Mouly to

reduce latency in terms of providing access to broadcast objects and providing real time collaboration among users via Internet.

3. As to claims 2,15 Mouly-Moline teach characterized in that repetition distance specifies how many of the plurality of broadcast objects will be transmitted after a specific broadcast object until this specific broadcast object will be transmitted again (Mouly, col. 9, lines 5-22).

4. As to claim 3 Mouly-Moline teach characterized in that said repetition distance specifies how much data will be transmitted after a specific broadcast object until this specific broadcast object will be transmitted again (Mouly, col. 4, lines 20-32).

5. As to claims 4,16 Mouly-Moline disclosed repetition distance specifies how much time it will take after a specific broadcast object is broadcast until this specific broadcast object will be transmitted again (Mouly, col. 3, lines 27-42).

6. As to claim 5 Mouly-Moline disclose characterized by an upper bound which specifies a maximum value for the repetition distance (Mouly, col. 4, lines 60-67).

7. As to Claim 6 Mouly-Moline discloses said repetition distance specifies an absolute value in the form of a repetition time (Mouly, col. 4, lines 4-19).

8. As to claim 17 Mouly-Moline characterized in that said repetition distance ® specifies how much time will be elapse after a specific broadcast object is broadcast until this specific broadcast object will be transmitted again (Mouly, col. 4, lines 21-33).

9. Claims 7-10 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Mouly (U.S. 5,878,033) in view of Moline (U.S. 6,067,566) as applied to claim 1 above, and further in view of Cheng et al (U.S. 6,157,949).

As per claim 7 Mouly and Moline disclosed the invention substantially in claim 1 but failed to disclose information about broadcast cycle generator however Cheng et al discloses broadcast cycle as a sequence of segments and sequence of objects, the sequence of objects, the sequence of objects describing which objects belong to the broadcast cycle and how often each object is included in the broadcast cycle, and the sequence of segments describing the transmission order of segments of all objects (col. 9, lines 7-64).

It would have been obvious to one having ordinary skill in the networking art at the time of the invention was made to have incorporated broadcast cycle as a sequence of segments and sequence of objects as taught by Cheng in the method of Mouly-Moline to increase the efficiency of broadcasting data by reducing the latency in the access times of accessing the broadcast objects.

12. As to claim 8 Mouly-Moline-Cheng teach parameter specifying an allocated bitrate for the transmission of objects is added if the repetition distance is encoded as a time value (Cheng, col. 3, lines 35-50).

13. As to claim 9 Mouly-Moline-Cheng discloses characterized in that in a DAB system the broadcast cycle generator receives object parameters from a server application block calculates the repetition distance of each object and selects segments for transmission (Cheng, Abstract).

14. As to Claim 10 Mouly-Moline-Cheng teaches a broadcast object decoder retrieves a unique identifier of an object and the repetition distance and obtains the current time value from a time service, and an absolute value for reception point in time is calculated from the reception distance and the current time value and is stored together with the object (col. 8, lines 28-62).

15. Claims 11-12 are rejected under 35 U.S.C. 103 (a) as being unpatentable Mouly (U.S. 5,878,033) in view of Moline (U.S. 6,067,566) in view of Cheng et al (U.S. 6,157,949) and further in view of Boyle (U.S. 5,864,854).

However Mouly-Moline-Cheng disclosed the invention substantially in claim 10 but failed to disclose information about requesting data objects using object Identifier. In the same field of endeavor Boyle discloses data object requestor allows to request certain object by an object identifier and allows to request the next reception point in time of an object.(col. 6, lines 40-51).

It would have been obvious to one having ordinary skill in the networking art at the time of the invention was made incorporated the use of object identifier to send data packets as taught by Boyle in the methodology of Mouly-Moline-Cheng to increase the accuracy of the data received and make the network more efficient in terms of optimized data placement by reducing the search time using the object Identifier.

18. As to Claim 12 Mouly-Moline-Cheng-Boyle teach requester can use the repetition distance as repetition time information for managing cache (Boyle, col-3, lines 58-67 and col-4, lines 1-17).

19. Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Mouly (U.S. 5,878,033) in view of Moline (U.S. 6,067,566) and further in view of Lindholm (U.S.6,345,313).

Mouly-Molin disclosed the invention substantially in claim 1 but failed to disclose the information about the progress indicator however Lindholm discloses it is used in a progress indicator (Column 3, Lines 32-35).

It would have been obvious to one having ordinary skill in the networking art at the time of the invention was made to have incorporated the progress indicator as taught by Lindholm, in the methodology of Mouly-Molin to reduce the overhead caused by frequently repeatedly association resulted in reducing access times of accessing broadcast objects.

Response to Arguments

20. Applicant's arguments filed 09/29/2006 have been fully considered but they are not persuasive. Response to applicant's argument is as follows.

A. Applicant argued that prior art did not disclose, "a method for determining access times of a plurality of broadcast objects in a broadcast channel wherein each of the plurality of said segments of said plurality of broadcast objects are permitted to (i) have a different size, (ii) be segmented into smaller units in order to allow overlapped transmission or parallel transmission.

As to applicant's argument Mouly disclosed the category cues corresponding to the repetitions (1^{st} bit of the field=1) are replaced by the sequence number of the corresponding first broadcast (for the (p+1)th broadcast of the same message during the period it would be possible to take the sequence number for any one of the p preceding broadcasts), this being advantageous in terms of volume of information since the sequence numbers are normally codeable on fewer bits than the category data (typically 6 bits instead of 15 if a capacity of the order of 40 messages per schedule period is provided for) (col. 4, lines 37-47). Mouly further disclosed that each service message has a length of 88 bytes distributed into 4 blocks of 23 bytes (each including one level-2 byte). In each base station of the network (Fig. 1), the service messages are delivered to a management unit which determines the sequence in which they will be broadcast, and which constructs the schedule messages to be intercalated into this sequence (col. 8, lines 27-34).

B. Applicant argued that prior did not teach "a next reception point in time of said broadcast object is calculated from a current time value and said repetition distance".

As to applicant's argument Mouly disclosed a first bit whose value indicates whether said one of said service messages ahs been broadcast during the preceding scheduled period, a second bit whose value indicates whether the broadcast is a repetition of said one of said service messages already broadcast during said associated scheduled period (col. 12, lines 46-51), wherein the sequence of said first and second bits, of said category cue and of said sequence number in the scheduled message is determined from the sequence in which the broadcast will occur during said associated schedule period (col. 12, lines 59-62).

C. Applicant argued that prior art did not teach " a repetition distance which is the distance between the completed transmission of broadcast object and its next repetition".

As to the argument Mouly disclosed at the end of the field for each broadcast consists either of the category cue if the broadcast is not a repetition of a message already broadcast during the period (second bit=0), or of the sequence number of an earlier broadcast of the message in question during the period if this is a repetition (second bit=1) (col. 4, lines 60-67).

D. Applicant argued that prior art did not teach "a broadcast object including a header defining a repetition distance".

As to the argument Moline disclosed track with time stamps of track. Track contains repetition sequences each of which fits repetitive pattern. It synchronizes the repetitive sequences in with repetitions (col. 17, lines 29-32).

E. Applicant argued that prior art did not disclose " a distance between a completed transmission of a broadcast object and its next repetition".

As to the argument Mouly disclose "cue if the broadcast is not a repetition of a message already broadcast during the period (second bit=0), or of the sequence number of an earlier broadcast of the message in question during the period if this is a repetition (second bit=1)" (col. 4, lines 60-

67). The above statement by Mouly deals with both circumstances where the broadcast repetition has prioritize by assigning different parameters and can interpreted as the distance between the two broadcasts where one is the repetition of the other one.

F. Applicant argued that Moline patent is not analogous art to the present invention and there is no suggestion to combine the Mouly and Moline references. Applicant also argued that Moline prior art is classified by the USPTO in U.S. classes 709 and 345; whereas Mouly is classified in classes 370 and 455. Accordingly, Moline is neither within the field of the present inventore' endeavor, nor is it within the field of the Mouly reference applied in combination.

As to applicant's arguments In response to applicant's argument that Mouly (U.S. 5,878,033) is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case Mouly prior art is part of the present invention where it broadcast messages using the TDMA technology, these messages can be music MIDI files or Mpeg file. Moline using the internet to transmit files over the network where the network can be using any kind of technology while in case of Mouly the network is based on TDMA technology.

G. Applicant argued that examiner should point out the motivation to combine the references as required in a proper prima-facie rejection.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the

teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case motivation to combine Moline and Mouly to reduce latency in terms of providing access to broadcast objects and providing real time collaboration among users via Internet.

Conclusion

21. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (571)-272-3885.

22. The examiner can normally be reached on Monday to Friday during normal business hours. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571)-272-3933. The fax for this group is (703)-746-7239. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for un published applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866)-217-9197 (toll-free).

AM

Adnan Mirza

Examiner

JASON CARDONE
SUPERVISORY PATENT EXAMINER